

A NEW SPECIES OF *STEMODIA* (SCROPHULARIACEAE)
FROM COSTA RICA

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ABSTRACT

A new species, *Stemodia costaricensis* B. Turner, is described from Cartago Province, where it is apparently locally abundant. It is known by twenty or more collections, all from the vicinity of Tapanti. The species is closely related to *S. reliquiarum* D'Arcy of Chiriquí Province, Panamá, but is readily distinguished by several consistent characters including leaf shape, lack of vestiture, and corolla size and shape. A key to the two taxa is provided along with a map showing their distribution.

KEY WORDS: *Stemodia*, Scrophulariaceae, Costa Rica, Panamá

D'Arcy (1979) described a new species of *Stemodia*, *S. reliquiarum* D'Arcy from Panamá. It is remarkable within *Stemodia* because of its pubescent, seemingly sessile anthers, and he commented that it "might warrant recognition at the generic level." Discovery of the present species, which contains the essential elements of *S. reliquiarum*, including pubescent anthers, adds an additional taxon to the complex concerned. The following couplet will distinguish between the two taxa:

- Leaves mostly broadly ovate to subdeltoid; pedicels and sepals glabrous; corollas strongly bilabiate (*Lobelia*-like), the central lower lobe 4-6 mm long; Costa Rica (Cartago Province). *S. costaricensis*
- Leaves mostly ovate-lanceolate; pedicels and sepals glandular hirsute; corollas not strongly bilabiate, the central lower lobe 2-3 mm long; Panamá (Chiriquí Province). *S. reliquiarum*



Fig. 1. Distribution of *Stemodia costaricensis* (open circle) and *S. reliquiarum* (closed circle) in Costa Rica and Panama respectively.

Stemodia costaricensis B. Turner, *sp. nov.* TYPE: COSTA RICA. Cartago Province: "1-4 km beyond first bridge within Hydroelectric Plant Property (Instituto Costaricensis Electricidad) enroute to the reservoir at the road terminus," 4800-4900 ft, common but very local, 4 Mar 1981, *F. Almeda & K. Nakai 4734* (HOLOTYPE: TEX!; Isotype: CAS).

Stemodiae reliquiaro D'Arcy sed foliis late ovatis (vs. lanceolatis), pedicellis ac calycibus glabris (vs. pilosis), et corollis majoribus lobis longissimis 4-6 mm longis (vs. 2-3 mm) differt.

Sprawling or trailing suffruticose glabrous perennial herbs 10-100 cm long, 1.0-1.8 cm wide; petioles mostly 3-8 mm long; blades broadly ovate to triangular ovate, trinervate, minutely punctate beneath, the margins serrulate. Flowers arranged in terminal bracteate racemes 3-8 cm long, the pedicels glabrous, mostly 8-14 mm long. Calyx glabrous, ebracteolate, mostly 3-4 mm long, the lobes essentially alike and free to the base. Corollas reportedly deep violet blue and "Lobelia-like," the tube ca. 3 mm long, the upper 2 lobes 2.5-3.0 mm long, the lower 3 lobes mostly 3-6 mm long, the central lobe 4-6 mm long. Capsule ovate, ca. 4 mm long. Seeds numerous, brown, ovoid, finely reticulate, ca. 0.5 mm long.

ADDITIONAL SPECIMENS EXAMINED: COSTA RICA. Cartago: Instituto Costaricensis de Electricidad, ca. 13 km beyond the bridge at Tapanti, 1400-1600 m, 10 Jul 1977, *Almeda 3022* (CAS,F); Refugio Nacional de Fauna Silvestre Tapanti, along river just beyond Puente dos Amigos, 1500 m, 23 Mar 1986, *Almeda 5761* (TEX); ca. 10 km S of Tapanti, ca. 1600 m, 14-17 Jul 1971, *Burger 7537* (DUKE); Tapanti Hydroelectric Reserve, along Río Dos Amigos, 1600-1700 m, 23 Jun 1976, *Croat 36214* (F,MO); Tapanti Watershed Preserve, ca 20 mi SW of Paraiso, 5 Feb 1979, *Croat 46990* (MO); 12 km S of Tapanti, 1520 m, 5 Nov 1967, *Lent 1454, 1571* (F); Tapanti, mountain above town, ca. 1500 m, 23 Jun 1972, *Primack 180* (DUKE); ca. 12 km from the bridge at Tapanti, 1400-1500 m, 11 Aug 1981, *Taylor 1338* (DUKE); 7-12 km SE of Orosi, 1400-1600 m, 12 May 1975, *Utley 2500* (F); wooded slopes above Río Grande de Orosi, 1400-1700 m, 18 Feb 1976, *Utley 4157* (DUKE); and all of the following collections by R.L. Wilbur of DUKE which were collected in the same general region about Tapanti: 18068, 18495, 22385, 22434, 30795, 30875, 32939, 33083.

The twenty or more collections cited above were all obtained from the vicinity of Tapanti and all are exceedingly uniform. D'Arcy (1979) cited one of these (*Croat 36214*) as belonging to his concept of *Stemodia reliquiarum*. The two taxa, while closely related, are clearly distinct and by "specific standards" established in the genus *Stemodia* by previous workers appear to be worthy of specific rank.

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LITERATURE CITED

- D'Arcy, W.G. 1979. *Stemodia*, in Flora of Panama, Ann. Missouri Bot. Gard. 66:252-262.